MATRICES FORMED OF POLYMER AND HYDROPHOBIC COMPOUNDS FOR USE IN DRUG DELIVERY

Abstract of the Disclosure

A lipid or other hydrophobic or amphiphilic compound (collectively referred to herein as "hydrophobic compounds") is integrated into a polymeric matrix for drug delivery to alter drug release kinetics. In embodiments where the drug is water soluble, the drug is released over longer periods of time as compared to release from the polymeric matrix not incorporating the hydrophobic compound into the polymeric material. In contrast to methods in which a surfactant or lipid is added as an excipient, the hydrophobic compound is actually integrated into the polymeric matrix, thereby modifying the diffusion of water into the microparticle and diffusion of solubilized drug out of the matrix. The integrated hydrophobic compound also prolongs degradation of hydrolytically unstable polymers forming the matrix, further delaying release of encapsulated drug.